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KNOWLEDGE, ATTITUDE AND PRACTICES TOWARDS ORAL REHYDRATION THERAPY IN THE MANAGEMENT OF DIARRHEA AMONG CARETAKERS OF CHILDREN BELOW FIVE YEARS IN HOIMA REGIONAL REFERRAL HOSPITAL, HOIMA DISTRICT, A CROSS-SECTIONAL STUDY.

Felicious Murungi, Alex Katwe.
Kampala School of Health Sciences

Abstract

Background

The study assessed the knowledge, attitudes, and practices towards ORT in the management of diarrhea among caregivers of children under five years in Hoima Regional Referral Hospital, Hoima District.

Methodology

A descriptive cross-sectional study design was employed, and data were collected from a sample of 60 respondents. The respondents were selected by using a convenient sampling method as a sampling technique. Data was analyzed manually by use of tally sheets and entered into the computer using the Microsoft Excel computer program, illustrated using graphs and figures for quantitative data.

Results

(73%) of the respondent's children were females, (58%) of the respondent's children were in the age bracket of (1-3yrs). Knowledge towards ON ORT revealed that: (80%) obtained their information from health workers, (60%) had ever heard about zinc supplements. On attitude showed that (95%) of the respondents agreed that ORT in the management of diarrhea, (45%) agreed to ORT as the best in the management of diarrhea, and (100%) believed that feeding a child with diarrhea could stop the aggravation of the disease. Results on practices showed that (72%) of the respondents used boiled water when mixing ORT, (62%) gave ORT to the child every time after a loose watery stool, and (50%) kept the prepared ORT for 24hours.

Conclusion

The overall Knowledge was good, with a pleasing attitude; however, the overall practices were fair towards Oral rehydration therapy in the management of diarrhea, which puts children below five years at risk of developing diarrhea.

Recommendation

Hoima Regional Referral Hospital should do public enlightenment, and social marketing strategies in order to promote the use of ORT among caretakers of children under five years.

Keywords: *Oral Rehydration Therapy, Management of dehydration, Children under five years, Hoima Regional referral hospital.*
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Corresponding Author: Felicious Murungi
Email: *lynfellyshalom185@gmail.com*
Kampala School of Health Sciences

Background

Oral rehydration therapy (ORT), first introduced in the 1960s, 6 is a gold standard for treating fluid loss as a result of acute diarrhea. Oral rehydration solution (ORS) is composed of iso-osmolarity glucose electrolyte solution with base and citrate that is administered to treat dehydration. Diarrhea in children is defined as three or more bowel movements (passage of loose stool) per 24 hours or watery stool that is different from normal (Aghsaeifard Z, 2022). Worldwide, diarrhea was the second cause of death and morbidity among children under five years, and there are approximately 1.7 billion cases of childhood diarrheal disease every year (WHO, 2024). According to the report of Global Burden of Diseases (GBD) in 2019, in sub-Saharan Africa, the total Disability-adjusted life years (DALYs) estimate due to diarrhea was 13.01%. Poor access to sanitary materials was the main cause of diarrheal disease. In sub-Saharan Africa, access to water, sanitation, and hygiene (WASH) is very scanty, and the burden of diarrhea diseases is countless relative to the rest of the world. As claimed by the Global Burden of Diseases visual hub, total DALYS among children under five years in the Eastern sub-Saharan region contributed by diarrheal diseases was 10.21%. Different studies showed that the prevalence of diarrheal diseases among children under five years was high in East African countries. Based on meta-analysis conducted in Ethiopia, the prevalence of diarrhea ranges from 19% to 25% (Ermias B, 2022). Other studies conducted in Uganda,

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Rwanda, and Malawi uncovered that the prevalence of diarrheal diseases was 32%, 26.7%, and 20% respectively (Abiyu, 2022). In Hoima, the prevalence of diarrhea among children under 5 years old in this study was 12.4%. The risk of diarrhea was increased in non-working mothers, children aged between 6 and 24 months, and unprotected water sources. Christian religion, and not using bottle feeding, showed a reduced risk of diarrhea. The present study showed a high prevalence of diarrhea among children under five years of age (Ali, 2024). The study assessed the knowledge, attitudes, and practices towards ORT in the management of diarrhea among caregivers of children under five years in Hoima Regional Referral Hospital, Hoima District.

Methodology

Study design

A cross-sectional study design was employed with quantitative approaches where data was gathered at only one point at a time. This design was preferred for this study because it considered issues, for instance, economy, rapid data collection, and ability to understand the population from part of it.

Study area

The study was carried out from Hoima regional referral hospital, Hoima district, western part of Uganda, approximately 200 kilometers from Kampala district. It receives around 250 patients on average per day. And it has the following departments which include: OPD, Maternity, Antenatal, Inpatient wards, ART clinic, ENT clinic, Dental clinic, and Eye clinic. It receives approximately 20 cases of diarrhea per day at OPD.

Study population

The study population consisted of caretakers of children below 5 years in Hoima district who consented to participate in the study.

Sample size determination

The sample size was determined using Burton's formula (1965) Sample size (n) = QR/T
Where,
Q- Total number of days taken for data collection
R- Maximum number of respondents who were interviewed per day
T- Maximum time taken on each respondent per day. Values:
Q= 10 days
R= 6 respondents. T= One hour Therefore, n= QR/T
N= (10x6)/1 =60 Respondents
Therefore, the total number of 60 respondents was used for the study.

Study variables

Oral rehydration therapy in the management of diarrhea was the dependent variable, whereas knowledge, attitude, and practices of caretakers were the independent variables.

Inclusion criteria

The study was comprised of caretakers of children below 5 years in Hoima regional referral hospital who consented voluntarily during the time of data collection.

Sampling technique

Simple random sampling was used to select the sample from the source population. The technique was preferred because it ensures freedom from human bias and each member of the target population would have an equal and independent chance of being included.

Data collection tool

Semi-structured questionnaires consisting of both closed and open-ended questions written in English and later translated into local language (Runyoro) were used to collect data. The researcher considered questionnaires as the most convenient way of collecting data from respondents because it was easy for the researcher to administer and obtain data within a short time from a large number of respondents.

Pretesting of the questionnaire

A questionnaire was pretested by getting 10% of the sample from Hoima regional referral hospital for its validity.

Data collection procedure

An introduction letter was obtained from Kampala School of Health Sciences and delivered to the head of research department in Hoima regional referral hospital, Hoima district, seeking permission to carry out the study. When permission was granted, two research assistants with good knowledge of the local language, that is, Runyoro, were trained on research methodology and study objectives before data collection. All those who fulfilled the inclusion criteria were interviewed for a period of about 30 minutes from a quiet and private place, at the hospital premises. The procedure was repeated each day until the sample size of 60 respondents was obtained.

Quality control

The filled questionnaires were checked for completeness at the interview site before leaving the place. Partly filled questionnaires were handed back to the respective respondents for completion before being submitted to the supervisor.

Data analysis and presentation

Data was analyzed manually by use of tally sheets, a scientific calculator; systematically computed into frequency and percentages using Microsoft Excel to generate tables and figures for easy presentations.

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Results

Demographic data

Table 1: Shows the distribution of respondents according to demographic data (N=60)

Variables	Categories	Frequency	Percentages
Sex of the child	Male	16	27
	Female	44	73
Total		**60**	**100**
Age of the child (in years)	0-1	10	17
	1-3	35	58
	3-5	15	25
Total		**60**	**100**
Education levels	Never went to school	04	7
	Primary	11	18
	Secondary	20	33
	College/ university	25	42
Total		**60**	**100**
Relationship to the Child	Mother	45	75
	Father	10	17
	Others	5	8
Total		**60**	**100**
Tribe of the caretaker	Munyoro	43	72
	Mutoro	9	15
	Muganda	3	5
	Others	5	8
Total		**60**	**100**

Table 1 shows that the study findings revealed that the majority (73%) of the respondents' children were females, whereas the minority of the respondents' children (27%) were male by sex. The study findings revealed that most (58%) of the respondents' children were in the age bracket of (1-3yrs), whereas the least (17%) were in the age bracket of (0-1yr). About the study findings regarding the educational level, most of the respondents (42%) had attained university/ college level of education, whereas the least (7%) had never gone to school. In addition to that, the study findings also revealed that the majority (75%) of the respondents were mothers to their respective children, whereas the minority (8%) had other relationships (i.e., aunt, uncle) to the children. The results from the study also showed that most of the respondents (43%) were Banyoro by tribe, whereas the least of the respondents (5%) were Baganda by tribe.

Knowledge towards Oral Rehydration Therapy in The Management of diarrhea Among Caretakers of Children below Five Years

Figure 1: Shows the distribution of respondents according to whether they had ever heard about oral rehydration therapy (N=60).

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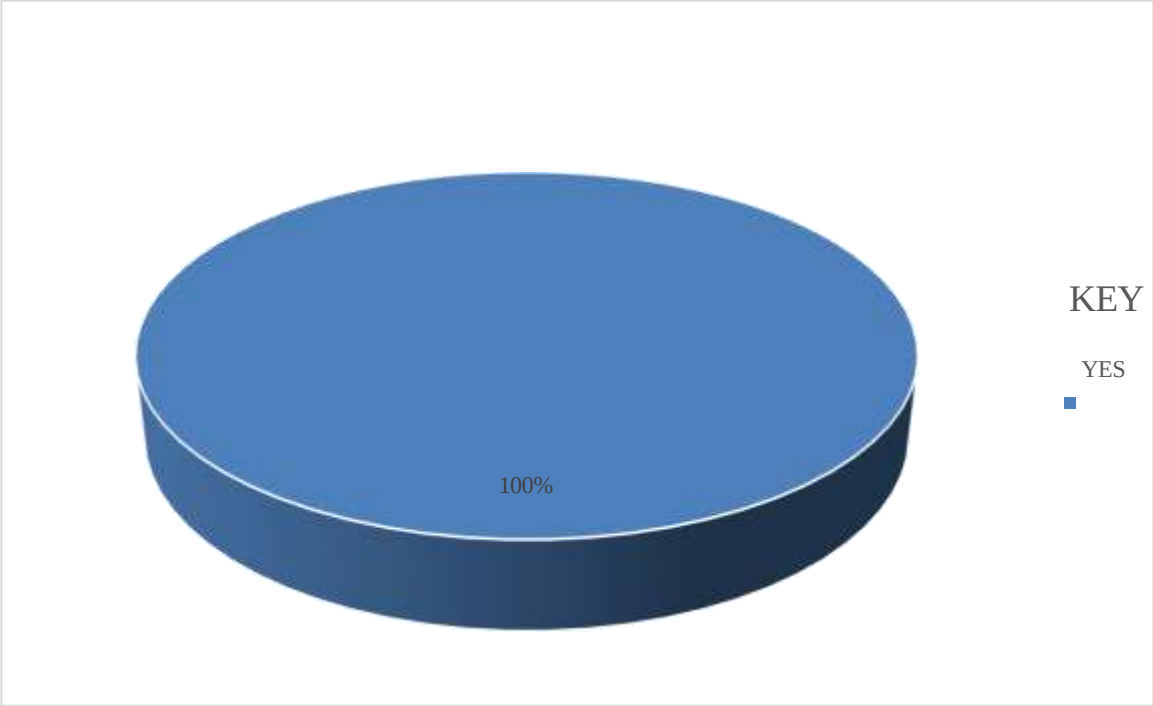

Figure 1 shows that all of the respondents (100%) had ever heard about oral rehydration therapy in the management of diarrhea among children below 5years.

Figure 2: Shows the distribution of respondents according to the sources of information on oral rehydration therapy (N=60)

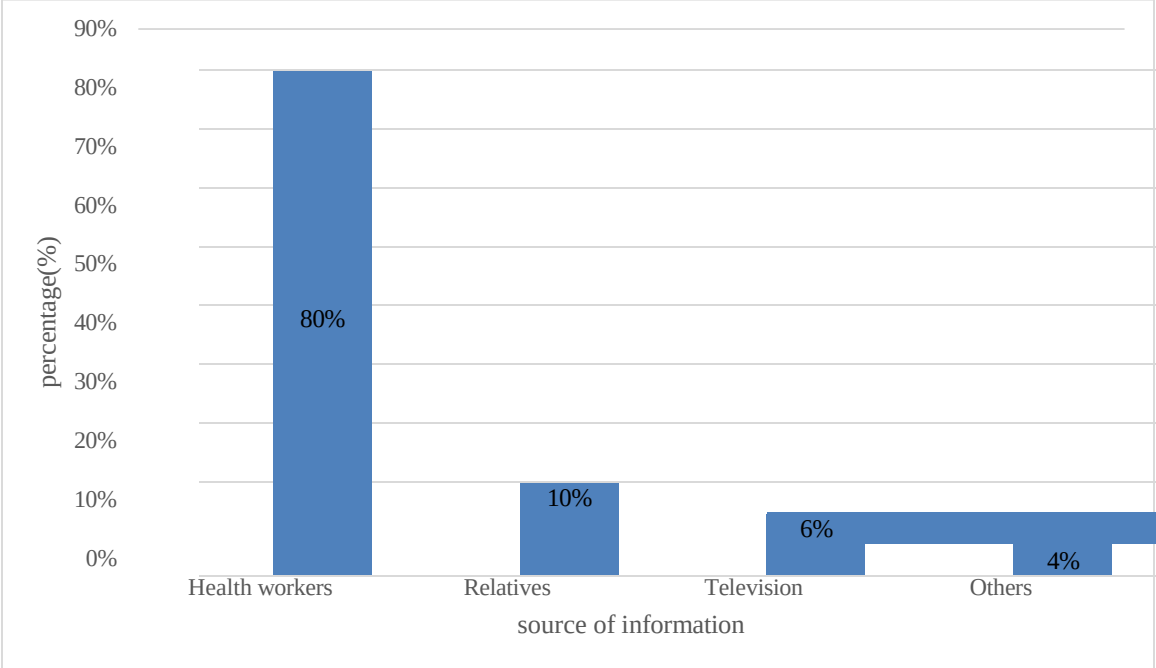

Figure 2 shows that the majority of the respondents (80%) reported having obtained their information about oral rehydration therapy from health workers, whereas the minority of the respondents (4%) obtained their information from other sources,

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for example, media

Table 2: Shows the distribution of respondent according to whether they had ever heard of zinc supplements being used in the management of diarrhea (N=60).

Response	**Frequency (f)**	**Percentage (%)**
Yes	36	60
No	24	40
Total	**60**	**100**

Table 2 indicates that the study findings regarding whether the respondents had ever heard about zinc supplements in the management of diarrhea revealed that the majority (60%) had ever heard of it, and the least (40%) had never heard of it.

Table 3: Shows the distribution of respondents according to what time they knew as the best for initiation of oral rehydration therapy (N=60).

Response	**Frequency (f)**	**Percentage (%)**
As soon as diarrhea starts	30	50
After one day	22	37
Others	8	13
Total	**60**	**100**

Table 3 shows that half of the respondents (50%) reported that the time they knew as best for initiation of oral rehydration therapy was as soon as the diarrhea started, whereas the least (13%) were among the others, like two days after the diarrhea started.

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Table 4: Shows the distribution of the respondents according to their knowledge about the causes of diarrhea (N=60)

Response	**Frequency (f)**	**Percentage (%)**
Handwashing without soap before preparing the meals of the child	9	15
Open dumping of feaces	2	3
Using unclean feeding bottles for a child	15	25
Contaminated foods and Drinks	28	47
Others	6	10
Total	**60**	**100**

Table 4 shows that most of the respondents (47%) reported contaminated foods and drinks as the major cause of diarrhea, whereas the least (3%) reported open dumping of feaces as the cause of diarrhea.

Figure 3: Shows the distribution of the respondents according to whether they had knowledge on how to prepare oral rehydration therapy (N=60).

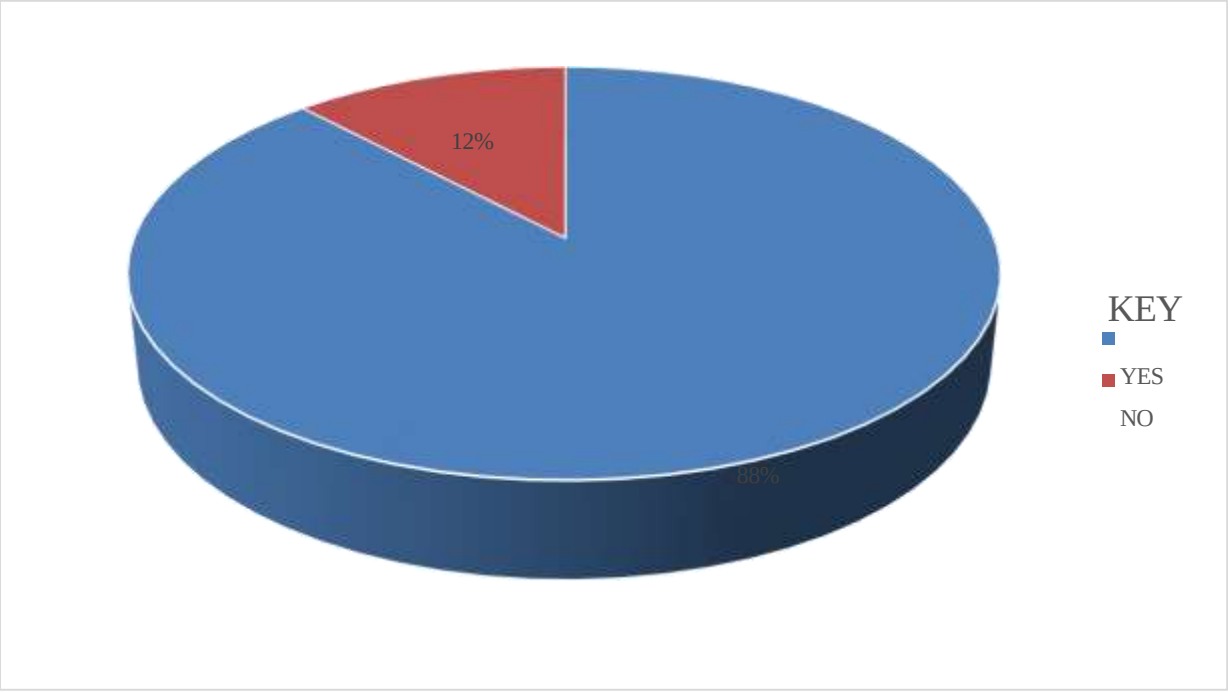

Figure 3 shows that the majority of the respondents (88%) had knowledge on how to prepare oral rehydration therapy, whereas the minority (12%) were not able to prepare oral rehydration therapy.

Attitude towards Oral rehydration therapy in the management of diarrhea among caretakers of children below five year

Table 5: Shows the distribution of respondents according to whether they agree that oral rehydration therapy was used in the management of diarrhea (N=60)

Response	**Frequency (f)**	**Percentage (%)**
Agree	57	95
Disagree	3	5
Total	**60**	**100**

Table 5 shows that nearly all the respondents (95%) agreed that oral rehydration therapy was used in the management of diarrhea, whereas the least (5%) said that oral rehydration therapy was not effective in the management of diarrhea.

Figure 4: Shows the distribution of the respondents according to what they thought was best in the management of diarrhea (N=60).

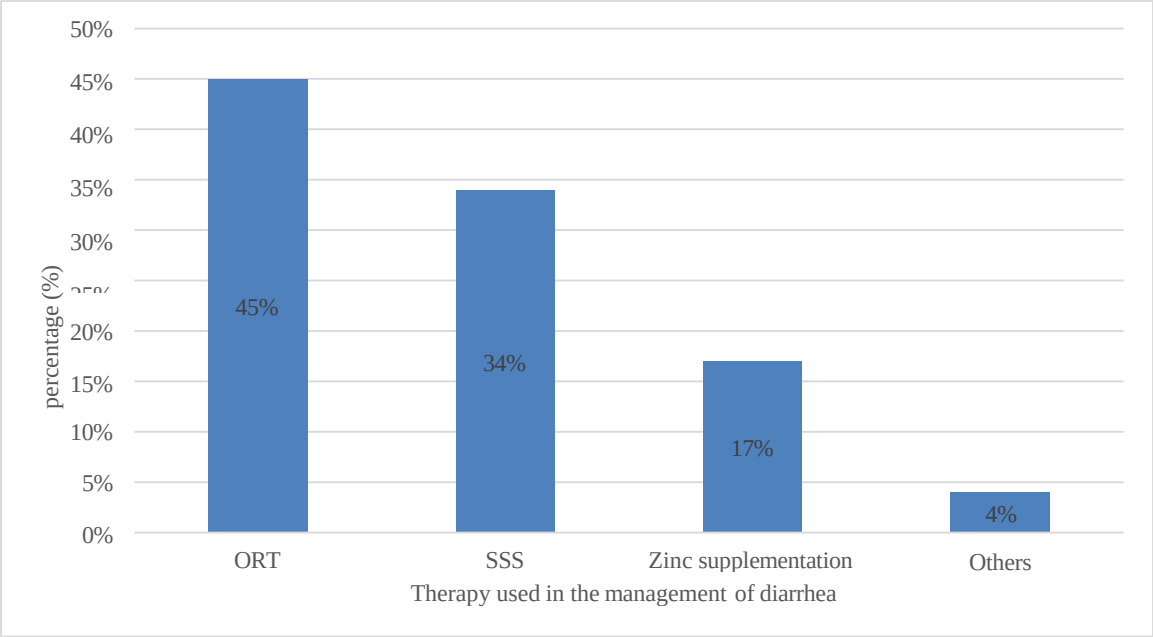

Figure 4 shows that most of the respondents (45%) thought that oral rehydration therapy was the best in the management of diarrhea among children below five years, whereas the least (4%) thought other measures were best, like exclusive breastfeeding and continued feeding.

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Table 6: Shows the distribution of respondents according to whether they believed that feeding a child with diarrhea stops aggravation of the disease (N=60).

Response	**Frequency (f)**	**Percentage (%)**
Yes	60	100
No	0	0
Total	**60**	**100**

Table 6 indicates that all the respondents (100%) believed that feeding a child with diarrhea could stop aggravation of the disease.

Figure 5: Shows the distribution of the respondents according to whether they agreed that diarrhea was a serious condition that could lead to dehydration and death (N=60).

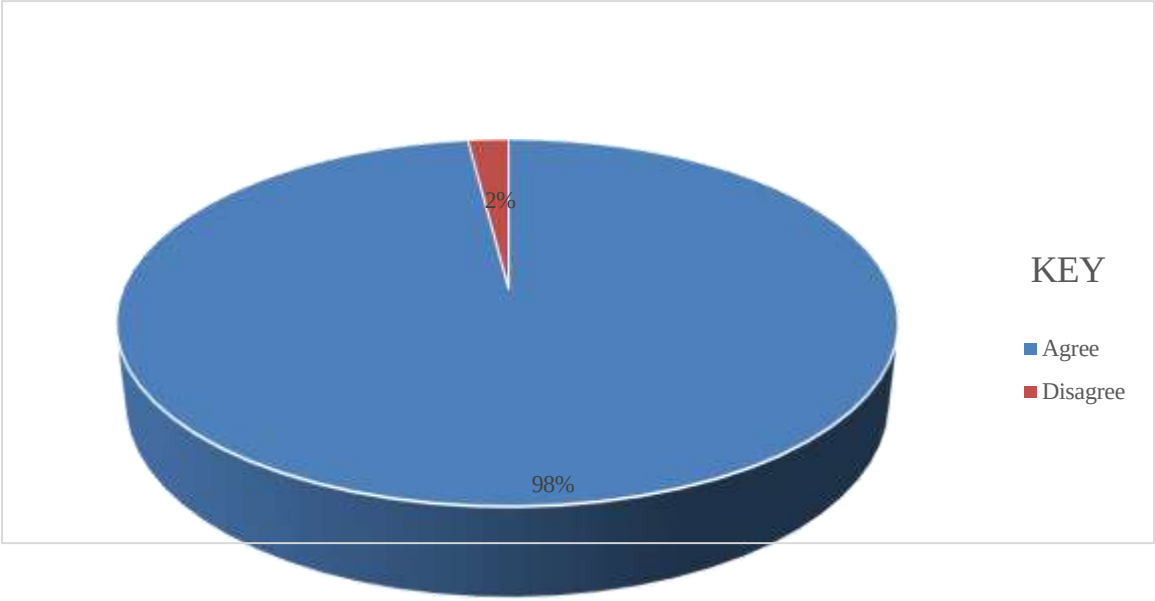

Figure 5 indicates that the majority (98%) of the respondents agreed that diarrhea was a serious condition which could lead to dehydration and death..

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Figure 6: Shows the distribution of respondents according to how they felt about homebased management of diarrhea in children under the age of five (N=60)

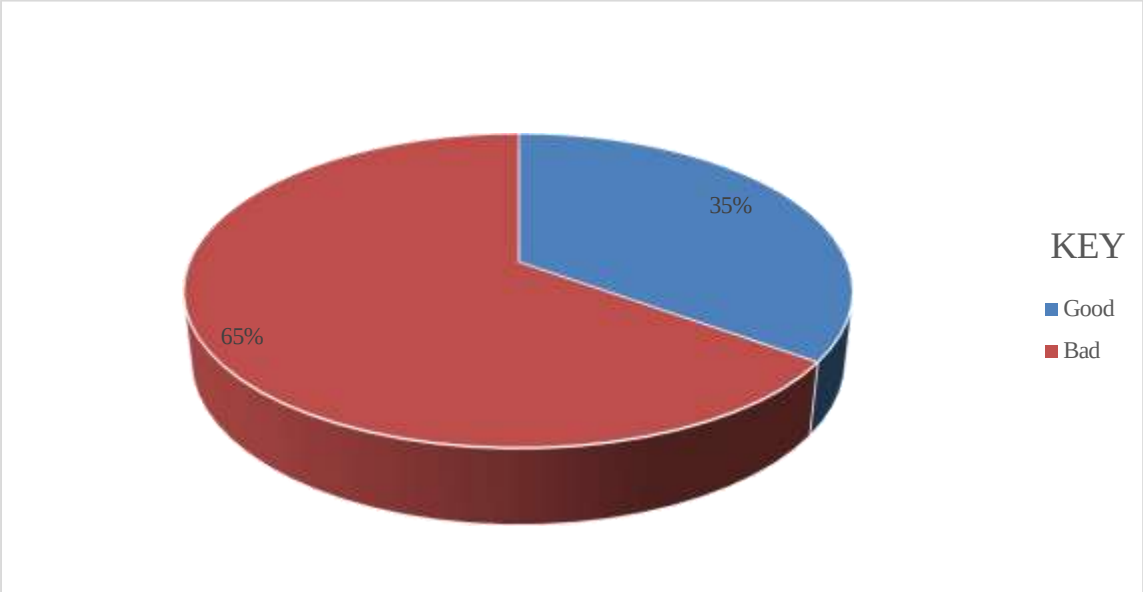

Figure 6 showed that most of the respondents (65%) did not feel good about homemade management of diarrhea in children under the age of five, whereas the least (35%) felt good about homemade management of diarrhea in children under five.

Table 7: Shows the distribution of respondents according to whether they agreed that exclusive breast feeding was helpful in the management and prevention of diarrhea (N=60)

Response	**Frequency (f)**	**Percentage (100%)**
Agree	33	55
Disagree	27	45
Total	**60**	**100**

Table 7, more than half of the respondents (55%) agreed that exclusive breastfeeding is helpful in the management and prevention of diarrhea, while the least (45%) disagreed with breastfeeding when the child has diarrhea.

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Figure 7: Shows the distribution of respondents according to what type of water they used when mixing/ preparing oral rehydration therapy (N=60).

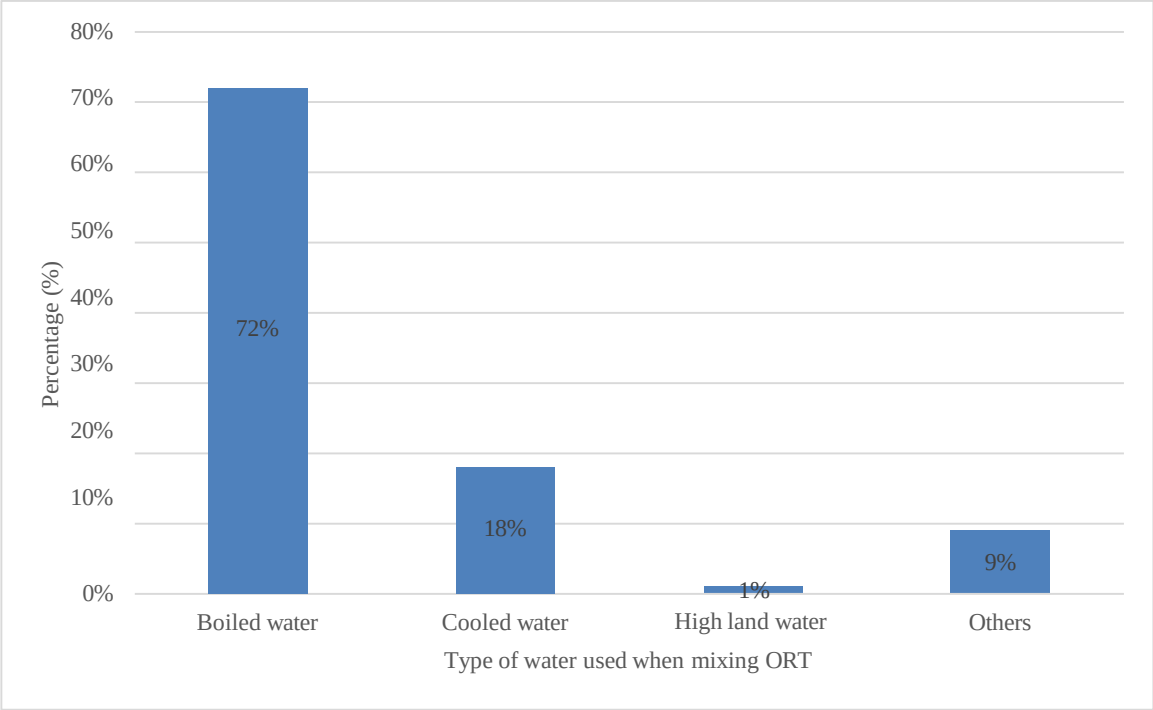

Figure 7 shows that most of the respondents (72%) reported using boiled water when mixing/ preparing oral rehydration therapy, whereas the least (1%) reported using highland water when mixing oral rehydration therapy.

Table 8: Shows the distribution of the respondents according to how often they gave oral rehydration therapy to the child when managing diarrhea (N=60)

Response	**Frequency (f)**	**Percentage (%)**
Every after a loose watery stool	37	62
6 and above times a day	14	23
Once a day	3	5
Others	6	10
Total	**60**	**100**

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Table 8 indicates that the majority of the respondents (62%) reported that they gave oral rehydration therapy to the child every time after a loose watery stool when managing diarrhea, and the least (5%) reported giving oral rehydration therapy once a day when managing diarrhea.

Table 9: Showing the distribution of the respondents according to how long they kept the prepared ORT (N=60)

Response	**Frequency (f)**	**Percentage (%)**
19 to 24 hours	30	50
13 to 18 hours	4	7
6 to 12 hours	20	33
Others	6	10
Total	**60**	**100**

Table 9 showed that the majority of the respondents (50%) reported that they kept the prepared oral rehydration therapy for 19 to 24 hours, while the minority of the respondents (7%) reported that they kept the prepared ORT for 13 to 18 hours.

Figure 8: Shows the distribution of respondents according to how they manage their children when they got diarrhea (N-60)

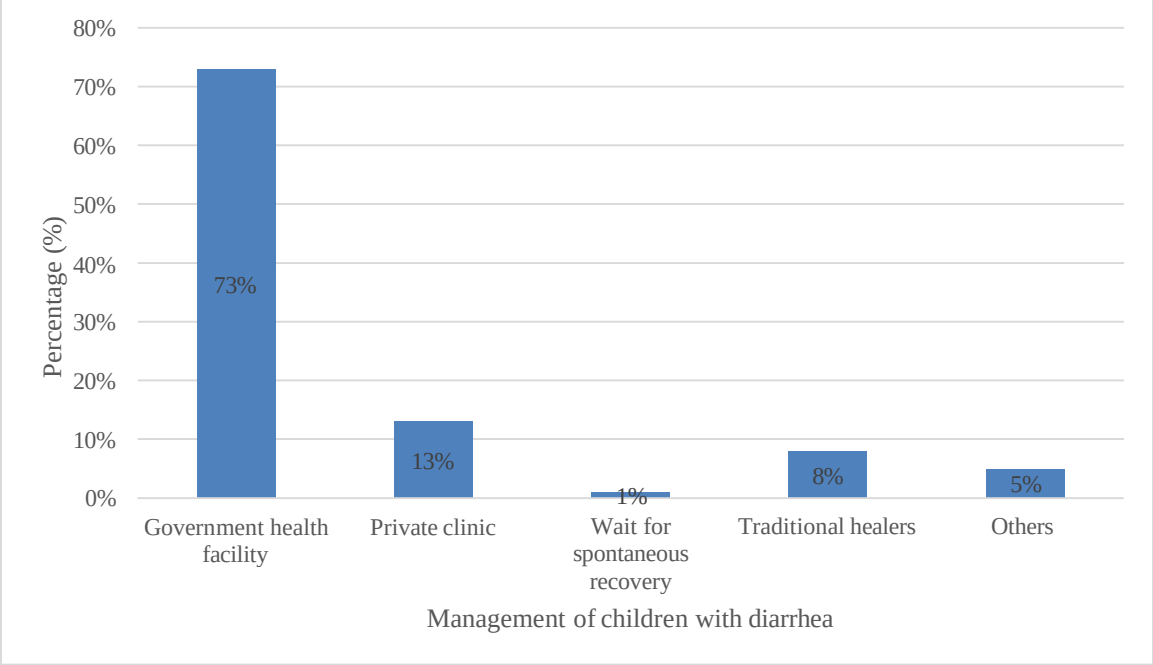

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Figure 8 indicates that the majority of the respondents (73%) reported that they took their children to a government health facility when they got diarrhea, while the least (1%) reported staying at home due to ignorance and lack of transportation to the hospital.

Figure 9: Shows the distribution of respondents according to whether they used any other remedy/ medicine when their child (ren) has diarrhea (N=60)

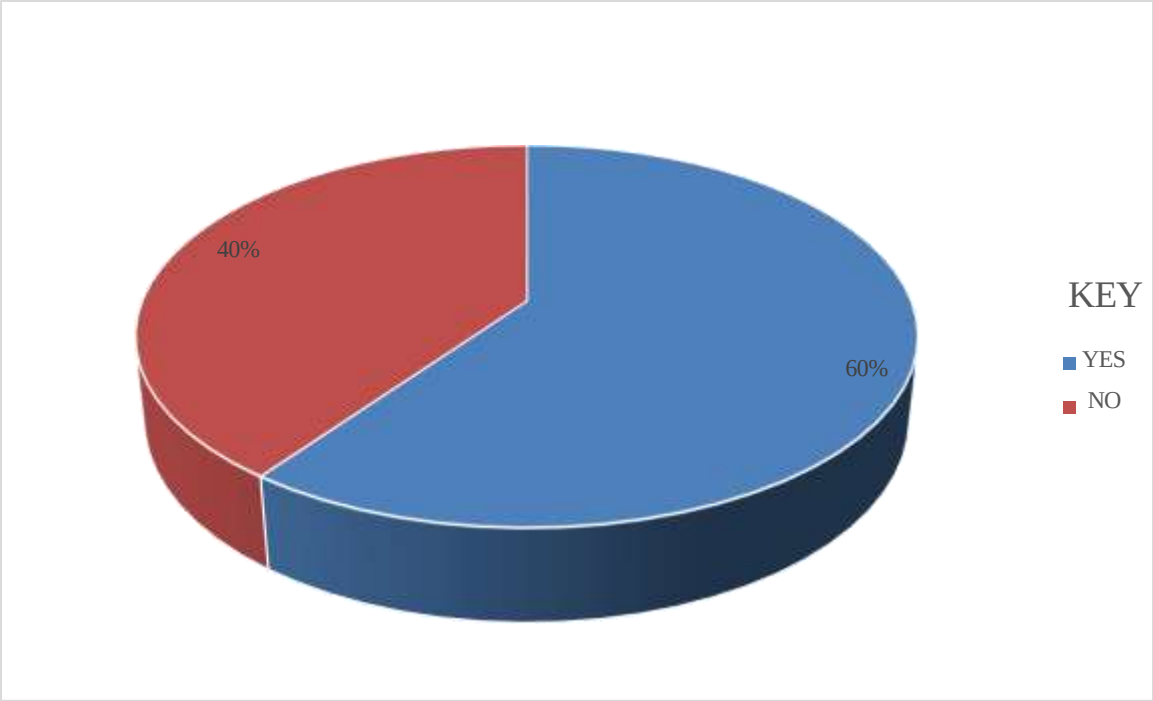

Figure 9 shows that more than half of the respondents (60%) reported that they used other remedies/medicine at home like charcoal tablets, rice water, and grinded charcoal mixed in water when their child had diarrhea, whereas the least (40%) did not use any other remedy/medicine at home.

Table 10: Showing the distribution of the respondents according to how they gave the prepared ORT when managing diarrhea (N=60).

Response	**Frequency (f)**	**Percentage (%)**
As much as a child could drink	21	35
Measuring using a cup of coffee/ quarter cup every after a loose watery stool	33	55
Others	6	10
Total	**60**	**100**

Table 10 showed that most of the respondents (55%) reported giving the prepared oral rehydration therapy by measuring using a cup of coffee/ quarter cup after every loose watery stool, whereas the least (10%) were among others, like measuring the prepared ORT using a tablespoon.

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Discussion of findings

Knowledge towards oral rehydration therapy in the management of diarrhea among caretakers of children below five years

The study discovered that all respondents (100%) had ever heard about ORT. This could be as a result of study participants being very well conversant with the study context. This is in line with the study that was carried out in a military barracks in Ibadan, Nigeria, by Agbolade (2015), where it was revealed that 98.0% of the respondents had ever heard of ORT. The study also revealed that most of the respondents (80%) had obtained information about ORT from health workers. This could be attributed to the fact that mothers always took their children to the hospital and the health workers used to provide information about ORT being used in the management of diarrhea. This is in line with the study carried out in Gondar town by Yimenu Dawit, 2022, where results regarding source of information on ORT were health facilities by health workers (83%) of the respondents. The study further revealed that most of the respondents (60%) had ever had experience with zinc supplementation in the management of diarrhea, and this strongly confirms that participants had reasonable knowledge on the advantages of using zinc while managing diarrhea. The results were in agreement with the study that was carried out in Burayu town, Oromia, Ethiopia, by Duguma NA (2024), where (68%) of the subjects had heard about zinc supplementation. Findings from the study showed that half of the respondents (50%) knew that the best time for initiation of ORT was as soon as diarrhea started, and this could be because of how commonly ORT was used and how they could have been instructed by the health personnel. This was in agreement with the study conducted in Burayu town, Oromia, Ethiopia by Duguma NA (2024), where (64.8%) of the respondents reported that giving ORT should start as soon as diarrhea started. In regards to knowledge about causes of diarrhea, most of the respondents (47%) reported contaminated foods and drinks as the major cause of diarrhea. This deviation in figures could be due to differences in the educational status and the living environment of the respondents. This was in disagreement with the study carried out in Lagos, Nigeria, by Momoh Faith E (2022), where (70.0%) reported handwashing without soap before preparing meals for the child as the major cause of diarrhea. About the respondent's knowledge on how to prepare ORT, the majority (88%) of the respondents knew how to prepare ORT. This could be because of how ORT is being commonly used in the management of diarrhea. This was in line with the study carried out on knowledge, attitude, and practices towards oral rehydration therapy in the management of diarrhea among caretakers of children below five years by Divasha (2020), which revealed that 52.8% knew the correct method of preparing ORT.

Attitude towards oral rehydration therapy in the management of diarrhea among caretakers of children below five years

Nearly all respondents (95%) agreed that oral rehydration therapy is used in the management of diarrhea. This could be because most of them administered it to their children when having diarrhea, and their well-being improved. This was in line with the study carried out in Katoogo Health Centre III, Mukono district by Sebuliba Julius (2022), where more than half of the respondents (78%) agreed that ORT was good for management of diarrhea. The study discovered that most of the respondents (45%) thought that ORT was the best in management of diarrhea among children below five years. This could be because of their previous experiences when their children got diarrhea. This is in agreement with the study that was carried out in Gondar town by Yimenu Dawit (2022), where 53.6% of the study participants thought that ORT was the mainstay of the treatment of diarrhea. The study also showed that all the respondents (100%) believed that feeding a child with diarrhea could stop aggravation of the disease. This could be attributed to the respondents' previous experiences when their child (ren) got diarrhea. The results were in agreement with the study that was in Gondar town by Yimenu Dawit (2022), where it revealed that almost all the respondents (91.8%) believed that feeding a child with diarrhea would not aggravate the disease. The finding from the study revealed that almost all of the respondents (98%) agreed that diarrhea was a serious condition which could lead to dehydration and death. This could be because the study was carried out in an urban area where most participants were literate and had knowledge on the seriousness of the disease. The results of this study were in line with a study carried out in Lagos, Nigeria, by Momoh Faith (2022), where (85.3%) of the study participants agreed that diarrhea was a serious disease that could lead to death. The study findings also revealed that most of the respondents (65%) did not feel good about homemade management of diarrhea in children under five. This could be attributed to the fact that they feared dangers that could result from the poor management. The results were in disagreement with the study that was carried out in Ginchi town, Oromia region, west Ethiopia by Terefe G (2022), where (62.0%) of the caregivers had a positive attitude towards home-based management practice of diarrhea. More than half of the respondents (55%) agreed that exclusive breastfeeding was helpful in the management and prevention of diarrhea. This could be because of the good knowledge on the benefits of breastfeeding that they had. This was in line with the study carried out in Katoogo Health Centre III, Mukono district by Sebuliba Julius (2022), where (40%) of the respondents noted that exclusive breastfeeding is helpful in the prevention and management of diarrhea.

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Practices towards oral rehydration therapy in the management of diarrhea among caretakers of children below five years

Results from the study revealed that most of the respondents (72%) reported using boiled water when mixing/ preparing ORT. This could be attributed to the fact that boiled water is easily accessible since it can be prepared at home and it is cheaper and safer. This was in line with the study that was carried out in Gondar town by Yimenu Dawit (2022), where the majority of the respondents (33.3%) used boiled and cooled water to prepare ORT. The study discovered that the majority of the respondents (62%) administered ORT to the child after a loose watery stool when managing diarrhea. This could be because of the prescriptions they always got and the directions given to them by the health workers whenever their children got diarrhea. These results were in agreement with the study that was carried out in Burayu town, Oromia, Ethiopia, by Duguma NA (2022), where most (55%) of the participants started ORS soon after they noticed loose stool. About how long the respondents kept the prepared ORT, the majority (50%) kept it for 19 to 24 hours, whereas the minority (7%) kept it for 13 to 18 hours. This could be attributed to what their health personnel advised them to do. This was in agreement with the study that was carried out in Gondar town by Yimenu Dawit (2022), where 94.8% of the respondents had the practice to use ORS only for 24 hours after it was reconstituted. The study revealed that the majority of the respondents (73%) took their children to a government health facility whenever they got diarrhea. This could be because of the knowledge they had on the dangers that could result from poorly managed diarrhea. This was in line with the study that was carried out on knowledge, attitude, and practices towards oral rehydration therapy in the management of diarrhea among children below five years. Results showed that by Agbolade (2015) (72.7%) of the respondents preferred taking children with diarrhea to the hospital. In addition, more than half (60%) of the respondents reported that they used other remedies/medicines at home like rice water. This could be attributed to the fact that they are cheaper and easily accessible since some are homemade. This was in disagreement with the study that was carried out in Burayu town, Oromia, Ethiopia, by Duguma NA (2022), where among those children who had diarrhea, 54.5% were given ORS with zinc supplementation, which was the majority. The study findings revealed that more than half of the respondents (55%) reported giving the prepared ORT by measuring using a cup of coffee/ quarter cup after a loose watery stool. This could be because of how they were directed by the health workers whenever their children got diarrhea. This was in disagreement with the study that was carried out in Burayu town, Oromia, Ethiopia, by Duguma NA (2022), where the majority (63.7%) of the respondents replied that they gave ORS solution as much as the child could drink.

Conclusion

Basing on the overall findings from the study, the following conclusions were made: The study established that the overall knowledge towards ORT in the management of diarrhea among caretakers of children below five years was good which was evidenced by; all of the respondents (100%) had ever heard about ORT, (80%) obtained their information from health workers, (60%) had ever heard about zinc supplements, (50%) knew the best time for initiation of ORT as immediately the diarrhea starts, (47%) knew contaminated foods and drinks as the major cause of diarrhea, and (88%) knew how to prepare ORT. The study further established that the caretakers had a satisfactorily pleasing attitude towards ORT in the management of diarrhea among caretakers of children below five years. As (95%) of the respondents agreed that ORT was used in the management of diarrhea, (45%) agreed to ORT as the best in the management of diarrhea, (100%) believed that feeding a child with diarrhea could stop the aggravation of the disease, (98%) agreed that diarrhea was a serious condition which could lead to dehydration and death, (65%) did not feel good about home based management of diarrhea, and (55%) agreed that exclusive breastfeeding was helpful in the management and prevention of diarrhea. Regarding the overall practices of caretakers towards ORT in the management of diarrhea, the study established that they were somewhat fair. This was in the view that (72%) of the respondent's use boiled water when mixing ORT, (62%) gave ORT to the child every after a loose watery stool, (50%) kept the prepared ORT for 19 to 24 hours, (73%) took their children to a government health facility whenever they got diarrhea, (60%) use other remedies/ medicine at home, and (55%) gave ORT by measuring using a cup of coffee/ quarter cup every after a loose watery stool. Generally concluded that caretakers exhibited pleasant knowledge and attitude but fair practices towards ORT in the management of diarrhea, which leads to mismanagement of the condition

Recommendation

The local authorities should work together with the health workers at Hoima regional referral hospital, Hoima district, and conduct a formal training of mothers on the causes, prevention, and treatment of diarrhea using ORT. The training will provide an opportunity for mothers to acquire skills through return demonstration for correct preparation and administration of ORT to children who have diarrhea. Secondly, continuous health education can also be provided for mothers during antenatal or postnatal visits. Also, diarrhea prevention and treatment using ORT can be included as a component of mother and child welfare programs. The health workers should also constantly encourage mothers to wash their hands with water and soap before feeding the child, after going to the toilet/latrine, and those with feeding bottles for their children should thoroughly clean them with hot water before using them.

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List of abbreviations

DALYs : Disability-adjusted life years
GBD : Global burden of disease
HMD : Home management of diarrhea
MOH : Ministry of health
ORS : Oral rehydration solution/ salt
ORT : Oral rehydration therapy
UNICEF: United Nations International Children's Emergency Fund
WASH : Water, sanitation, and hygiene
WHO : World health organization?

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There is no source of funding.

Conflict of interest
No conflict of interest declared.

Availability of data
Data used in this study is available upon request from the corresponding author

Author's contribution
FM designed the study, conducted data collection, cleaned and analyzed data, and drafted the manuscript, and AK supervised all stages of the study from conceptualization of the topic to manuscript writing.

Ethical approval
After approval of the proposal by the supervisor, permission to collect and obtain data was sought using an introductory letter from the Kampala School of Health Sciences administration to the hospital; once permission was granted, the researcher explained the study objectives to the participants, and a consent form was signed by each respondent before collecting data. Information obtained from the respondents was kept confidential. This was done to ensure that the research ethics are observed throughout the study.

Informed consent
A consent form was filled by the respondents after explaining the purpose of the study to them. The respondents were assured of confidentiality as no name would appear on the questionnaire. No participant was forced to participate in the study, and all the study materials used during the interviews were safely kept under lock and key, only accessible by the researcher.

Author's biography
Felicious Murungi is a student of diploma in clinical medicine and community health at Kampala school of Health sciences.
Alex Katwe is a research supervisor at Kampala school of Health sciences.

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